1. GUIDANCE FOR RECLAMATION AND REUSE OF MUNICIPAL AND INDUSTRIAL WASTEWATER

1.1 INTRODUCTION

Land application of wastewater has long been recognized as a viable method of wastewater treatment. However, in some cases it became apparent that surface and ground water contamination related to the wastewater land application system operation was occurring. Experience and a better understanding of how ground water contamination is related to activities on the land surface raised awareness of the complexity surrounding the land treatment methods. These and other issues were the driving forces in developing a land application permit program in Idaho.

The broader topic of REUSE of wastewater includes many other uses besides land treatment and land application. The future direction of the Wastewater Land Application Permit Program will be to include these additional uses and to periodically update the rules and guidance as needed to address the demand. Future direction will also involve updating the name of the program to reflect these additional uses. From this point, the program is the Reclamation and Reuse of Municipal and Industrial Wastewater (REUSE) Program. Most of the present guidance now in this document addresses land application and land treatment of wastewater. Therefore Sections 2 through 15 of this document will be PART A of the guidance that addresses land application wastewater. Later, PART B will be added for further guidance for Class A reuse that does not rely on land treatment or extensive environmental monitoring.

It is important to remember that DEQ guidance does not have the force of law or regulation and does not replace best professional judgment, but provides a starting point and assistance in the design of wastewater reclamation and reuse systems and for writing permits.

1.2 WASTEWATER LAND APPLICATION PERMIT (WLAP) PROGRAM HISTORY

The Wastewater Land Application Permit (WLAP) Program is an established and well developed state regulatory program. The original program regulations became effective in April 1988 and companion guidelines were finalized in March 1988. The 1988 guidelines were of necessity very general, focusing on broad considerations for both the design and evaluation of WLAP proposals. Together, the regulations and guidelines helped establish parameters for workable land application permits that protected surface and ground water quality and met the treatment needs of the wastewater generator.

Five years into program implementation, it became apparent that some program components required more specificity in order for the second generation of permits to be issued in a fair and consistent manner while still allowing flexibility for site specific conditions. Also, significant

technical changes had been made which needed to be available to the permittee, including the protection of public and private wells, and ground water monitoring.

A WLAP Technical Work Group comprised of agency, industry, municipalities and technical consultants was formed in September 1993, to supplement the original guidelines on four selected issues of concern. The supplement, called the 1994 Technical Interpretive Supplement, included supportive information on: growing and non-growing season application rates, protection of public and private wells in the vicinity of land treatment facilities, buffer zones to protect the public, and grazing on land application sites.

Both the 1994 Technical Interpretive Supplement and the 1988 guidelines support and reinforce laws and regulations, but by themselves are not standards or mandates. Both the 1994 Technical Interpretive Supplement and the 1988 guidelines were published in April of 1996 as a combined document called the "Handbook for Land Application of Municipal and Industrial Wastewater" as a paper document.

In May of 2004, DEQ created an electronic web-based draft which was simply a reorganization by topic of the "Handbook" and called it the "Guidance for Land Application of Municipal and Industrial Wastewater". Since that time, DEQ has sought continued public input to update and make corrections to this initial web-based document.

As a part of the public process and in anticipation of a name change for the "Wastewater Land Application Permit Rules" to "Reclamation and Reuse of Municipal and Industrial Wastewater Permit Rules" (Reuse Rules), the name of this guidance is now **"Guidance for Reclamation and Reuse of Municipal and Industrial Wastewater" (Reuse Guidance)**. This will provide guidance for future uses of reclaimed wastewater that may or may not utilize land treatment or land application.

1.3 CURRENT AND FUTURE DIRECTION FOR THE RECLAMATION AND REUSE OF MUNICIPAL AND INDUSTRIAL WASTEWATER

New systems must be designed to meet all requirements of the Reuse Rules. The Reuse Guidance provides assistance to meet the requirements of the Rules, and therefore should be used by new systems to ensure compliance. Existing systems must also meet the requirements of the Reuse Rules. If a permittee has been experiencing operational or compliance problems meeting permit conditions or water quality standards, the Reuse Guidance should be reviewed in order to help attain compliance.

The Reuse Rules (link below) address the treatment of municipal and industrial wastewater by different types of land application and treatment systems and other treatment requirements for higher classes of effluent.

Reuse Rules - http://www2.state.id.us/adm/adminrules/rules/idapa58/0117.pdf

Additionally, the Ground Water Quality Rule (GWQR) is also linked below. The GWQR also has impact on Reuse Facilities and is provided here for completeness.

Ground Water Rule - http://www2.state.id.us/adm/adminrules/rules/idapa58/0111.pdf

Applicants also need to be aware of the Water Quality Standards and Wastewater Treatment Requirements, linked here.

http://www2.state.id.us/adm/adminrules/rules/idapa58/0102.pdf

In 2002, important new guidance was developed for the Reuse Program. More use was made of the Internet to provide this guidance to the public, the regulated community, and to DEQ internally. The inclusion of this new guidance in the Reuse Guidance Document is part of the continuing effort to provide quality guidance for the Reuse program through the involvement of the public in the program.

DEQ initiated a renewed effort in the public process in 2004 to provide for a consistent program to review existing guidance and to establish a process for introducing, reviewing, and approving new guidance. DEQ invited the public to meet to form an advisory working group to meet periodically to review existing Reuse Guidance and future guidance needs, and provide suggested updates, additions, deletions or corrections. DEQ posts these suggestions on its website for a 30-day public comment period. Following that public comment period, the advisory working group reviews public comments, modifies the guidance as appropriate, and then submits the final suggested modifications to the Director of DEQ for a final decision on including them in the Reuse Guidance. The advisory working group is open to the public at large and can introduce new suggested guidance to DEQ through this process.

The posting of all draft and final permits on the Internet was initiated in 2002. This program improvement has been successful to make the public and permittees more aware of the directions of the Program and to ensure permit consistency across the state. It is the intent of the Program to use the Internet to periodically update information and guidance on the DEQ web-site. Input from the public at large is welcome.

The Reuse Guidance is a dynamic information source that is updated as new technology becomes available or as additional issues of concern are researched and developed. DEQ is interested in comments on any issue of concern for future editions of the Reuse Guidance. Comments, suggestions, or issues of concern may be submitted to:

Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706-1255
Attention: Richard Huddleston, Program Manager
Wastewater Program

1.4 PREPARING A ~~RECLAIMED WASTEWATER~~ REUSE PERMIT APPLICATION FOR WASTEWATER LAND APPLICATION

A reclaimed wastewater reuse permit (Reuse permit) is required to modify, operate, construct or discharge to a reuse facility. The application of wastewater to land for treatment (wastewater land application) is one type of reuse. This section provides information on the process of applying for a Reuse permit.

The three major steps in preparing a Reuse permit application are listed below. These steps pertain to applying for a new permit, a renewal permit, a permit modification (minor or major), or to request a permit waiver.

1. Pre-application form submittal
2. Pre-application conference
3. Reuse permit application submittal.

A description of the pre-application form is given in Section 1.4.1. Items to consider when preparing for and participating in the pre-application conference are presented in Section 1.4.2. Materials to be included in the Reuse permit application submittal are described in Section 1.4.3. In Section 1.4.4, the typical steps towards obtaining a final Reuse permit (new, renewal, or modification) are listed.

Sections 1.4.1 – 1.4.4 address preparing a Reuse permit application for the treatment of municipal or industrial wastewater by application to land. In Section 1.4.5, requirements unique to preparing a Reuse permit application for other Direct Uses of Municipal Reclaimed Wastewater are described.

It is important to note that the Reuse rules (IDAPA 58.01.17) specify information that is required to be included in a Reuse permit application. In addition, application processing procedures are outlined in the Reuse rules. Section 600 of the Water Quality Standards and Wastewater Treatment Requirements rules (IDAPA 58.01.02) also specifies requirements for the land application of wastewater (Note – this will be changed to Wastewater Rules (IDAPA 58.01.16) next year). Also, the Ground Water Quality Rule (IDAPA 58.01.11) specifies necessary ground water quality requirements. Applicants are strongly encouraged to review these ~~both~~ rules to become familiar with these requirements (links to these ~~both~~ rules are provided in Section 1.3 of this document), before the pre-application form submittal and conference.

1.4.1 Pre-Application Form Submittal

The first step in preparing a Reuse permit application is to submit the Reuse permit pre-application form. This is a web-based form that should be completed and electronically submitted to the DEQ Regional Office in which the project is located <LINK>.

The contents of this form include identifying the type of application (new, renewal, major modification, minor modification, waiver request) and providing contact information. Through submitting this form, the DEQ Regional Office is notified that the applicant is initiating the Reuse permit application process.

1.4.2 Pre-Application Conference

Before submitting the Reuse permit application, it is highly recommended that a pre-application conference be held between the applicant and DEQ. For a new site, or if DEQ staff involved have not recently visited an existing site, consider scheduling a short site visit as part of the conference.

If applying for a minor permit modification or a permit waiver, contact the Regional DEQ Office to discuss your project prior to scheduling the pre-application conference. It is possible that the detailed information outlined in the remainder of this section does not pertain to your situation. Minor permit modifications are those, which if granted, would not result in any increased hazard to the environment or to the public health. Minor modifications are normally limited to:

1. The correction of typographical errors.
2. Transfer of ownership or operational control.
3. A change in monitoring or reporting frequency.

Waivers from the requirements of the Reuse rules may be granted by DEQ on a case-by-case basis upon full demonstration by the applicant that:

1. The waiver will not have a detrimental effect upon existing water quality and uses are adequately protected and
2. That the treatment requirements are unreasonable with current technology or economically prohibitive.

For all other types of Reuse permit applications (new, renewal and major modification), the applicant and DEQ may consider the more detailed pre-application conference information presented below.

In preparation for the pre-application conference, it is recommended that DEQ:

1. Review the pre-application form submitted by the applicant.
2. If an existing site, and if time allows, review the permit file prior to the conference:
    a. Determine the status of compliance activities in the current permit.
    b. Review recent annual reports regarding: hydraulic and constituent loading rates, results of monitoring efforts, and other operating issues identified in the reports or through DEQ review of the reports.
    c. Review available site inspection reports.
    d. If applicable, review existing legal agreements, such as Consent Orders or a Notice of Violation (NOV).

In preparation for the pre-application conference, it is recommended that the applicant consult the "Suggested Outline for Preparing the Technical Report" and the "Guidelines for Preparing the Site Maps" (presented in Section 1.4.3), assemble as many materials and maps as is practical, and be as prepared as possible to discuss the items listed in the suggested outline.

Items recommended for discussion between the applicant and DEQ during the pre-application conference are listed below. For some applicants, the pre-application conference may be a preliminary inquiry and more than one conference may be necessary.

1. Have the applicant describe their proposal in detail.
2. Discuss scheduling issues:
   a. For a new site, discuss when the applicant proposes to begin land application activities.
   b. For an existing site, discuss the timeframe for any proposed changes to land application activities.
3. Discuss the ownership of the land application site. If not owned by the applicant, discuss the need for providing a lease or rental agreement.
4. Review the Vicinity Map and Facility Site Map prepared for the pre-application conference. Discuss site topography, potential buffer zone issues, and other potential site constraints. Discuss what is recommended to be added to these maps for purposes of the Reuse permit application submittal.
5. Review the "Site Limitation Rating Criteria for Land-Applied Wastewater" table (presented in the Reuse Guidance document <LINK>) and discuss site specific characteristics.
6. Discuss recommended sampling and analysis efforts to be performed for the purposes of preparing the Reuse permit application. This may include additional sampling of the land applied wastewater, site soils, site groundwater, and/or other sampling and analysis important for site characterization.
7. Discuss the need (and, if appropriate, a schedule) for seepage rate testing of wastewater structures or ponds.
8. Discuss local permits and approvals that may be required (conditional use permit, planning and zoning requirements, other agency approvals…).
9. Determine if the land application site will be leased or operated by a third party. If a third party is involved, a signed contract or agreement will be required regarding third party responsibilities for operating the site under the conditions of the permit.
10. For renewal permits, discuss if an updated Plan of Operation and/or updates of other site management plans should be submitted with the Reuse permit application.
11. Review the "Suggested Outline for Preparing the Technical Report" and the materials assembled by the applicant for the pre-application conference. Discuss what additional information is recommended to be included with the Reuse permit application.
12. Discuss the overall steps and schedule for the permit process (refer to Section 1.4.4).

1.4.3 Wastewater Reclamation and Reuse Permit Application Submittal

The Reuse permit application submittal, at a minimum, should contain the items listed below.

1. Reuse Permit Application Form <LINK>: This form must be submitted with the signature of the owner or an authorized agent.
2. Technical Report (suggested outline is presented below).
3. Site Maps (described at the end of this section).
4. Plan of Operation:
   a. Existing facilities are required to have a plan of operation which describes in detail the operation, maintenance, and management of the wastewater treatment system. An up-to-date Plan of Operation should be available for DEQ review as part of the Reuse permit application.
   b. For new facilities, a general outline of a plan of operation should be submitted.

A suggested outline for preparing the Technical Report is provided below. Depending upon the facility, the outline below may be reduced or, alternatively, expanded upon. For a renewal permit or a permit modification, the outline may be greatly reduced if previously submitted items are still representative of the applicant's activities.

Suggested Outline for Preparing the Technical Report

I. Site Location and Ownership

A. Site Location

1. Describe the location of the wastewater treatment facility and, if different, the location of the land application site.
2. Describe relative locations of important land features (cities, roads…) to the treatment facility and land application site.
3. Describe adjacent land uses and identify distances from the boundary of the land application site(s) to the following buffer objects: dwellings, areas of public access, canals/ditches, private water sources, and public water sources.

B. Site Ownership

1. Identify who owns the land application site. If not owned by the applicant, describe any pertinent leases or agreements in place.
2. Within this section, or referring to an appendix, provide the following documentation:
   a. Land Application Site Ownership: provide documentation of site ownership for areas of land application.
   b. If the applicant is leasing or renting the land application site, provide an affidavit stating the specifics of the water use agreement or lease stating the actual control over the property. ~~a copy of the lease or rental agreement~~.

c. Provide copies of any other agreements affecting the ownership and/or operation of the site (right-of-way easements, for example).
d. List all local, state, and federal permits/licenses/approvals related to the land application facility. For each, list the date(s) of application, the current status, and, if applicable, the approval date. Include any required planning and zoning approvals and/or required conditional use permits.

II. Process Description

A. Process Flow Description

1. Identify the sources of wastewater. Describe any seasonal variations in the wastewater (quantity and quality).
2. Describe the flow path of wastewater from the wastewater source to the land application site.
3. Identify the major treatment steps (equipment) of the wastewater treatment facility. For municipal systems, describe the disinfection treatment system and the proposed level of disinfection.
4. Identify sizes and design capacities of major equipment.
5. Identify the flow design basis. For existing sites, present recent wastewater flow data.
6. If applicable, describe any alternate treatment methods being considered.
7. Describe procedures that would be followed if the principal wastewater treatment procedures could not be used temporarily.
8. Identify sources and types of generated waste solids.

B. Land Application Site

1. Identify the number of land application acres.
   a. If applying for a new permit, identify the proposed number of land application acres.
   b. If applying for a renewal permit or permit modification: 1) list the current hydraulic management units and associated acres and 2) describe any proposed changes to the land application acreage.
2. Identify the type(s) of irrigation system(s) (pivot, hand lines,…) and the corresponding irrigation efficiency(ies).

III. Site Characteristics

A. Site Management History

1. Describe past and current uses and management of the land application site including: important events and dates, cropping information, historic fertilizer use, and other key past and current site management information.

B. Climatic Characteristics

1. Describe the climatic characteristics of the site including precipitation data, high and low temperature data, frost free days, growing degree days, and prevailing wind direction.

C. Soils

1. Describe site soils. Present Natural Resource ~~Soil~~ Conservation Service (or similar) soil survey information and results of any on-site investigations.
2. Present and interpret available soil monitoring results.
3. If wastewater land application in the non-growing season is proposed, calculate and present the available water holding capacity of the soils.

D. Surface Water

1. Identify and describe the location of surface water(s) near the land application site.
2. As applicable, discuss canals, wetlands, springs, floodplains, and other surface water related site characteristics including beneficial uses.
3. Describe, as appropriate, the influence of site land application activities on nearby surface water(s).

E. Groundwater/Hydrogeology

1. Describe the groundwater system including: depth to first water, depth to regional groundwater, confined or unconfined (if known), flow direction (if known), and seasonal depth and flow direction variations. If applicable, describe the presence of a major aquifer.
2. Discuss the locations and uses of wells (public wells, private wells, monitoring wells, and injections wells) within ¼ mile of the land application site. Include copies of well logs, if available. The IDWR (Idaho Department of Water Resources, www.idwr.state.id.us) may be contacted for assistance.
3. If a Well Location Acceptability Analysis has been performed for the site, present and interpret results of the analysis.
4. Present and interpret available groundwater monitoring results (upgradient and downgradient of the land application site) and/or on-site investigations.
5. Present and interpret results of any groundwater modeling efforts for the site.
6. LINK to Section 2 for more information and complete checklist. (Note: This subsection may be revised after Section 2 is completed.)

IV. Wastewater Characterization, Cropping Plan, and Loading Rates

A. Wastewater Characterization

1. Identify the quantity of land applied wastewater (per day, per month, per year). Document how the quantity values were determined.
2. Characterize the concentrations of key constituents in the wastewater proposed for land application. Document how the concentration values were determined. Basic constituents of interest are: total nitrogen, total phosphorus, and Chemical Oxygen Demand (COD). Depending on the wastewater source, concentrations of other constituents may be important. For industrial systems, concentrations of total dissolved inorganic solids (TDIS) and/or metals may be pertinent. For municipal systems, total coliform counts may be presented.

B. Cropping Plan

1. Describe proposed crop selection and a 5-year rotation plan.
    a. For each crop, describe: planting and harvesting data, irrigation sensitivity, rooting depth, expected yield (compare to yield data published by Idaho county <LINK>), and expected crop uptake values for key constituents in the wastewater.
    b. For each crop, calculate and present the Irrigation Water Requirement (IWR). Document how the IWR value(s) were determined.
    c. If proposing to utilize wastewater for tree irrigation, present a silvicultural plan (a plan covering the care and cultivation of the trees).
2. Describe the proposed future use of fertilizers at the site. Document nutrient loading associated with fertilizer use.

C. Hydraulic Loading Rate

1. Present the expected wastewater hydraulic loading rates—by month for growing season and non-growing season.
2. Describe the availability of supplemental irrigation water for the site and whether or not supplemental irrigation water is expected to be used at the site. Provide documentation that ~~Address~~ water rights exist to provide supplemental irrigation. ~~issues~~. If expected to be used, present the typical ~~monthly~~ supplemental irrigation water hydraulic loading rates for potential crops.
3. Discuss irrigation scheduling for the site.
4. If storage of wastewater is proposed, prepare and present a monthly water balance for the storage structure(s) reflecting: number of days of storage, required freeboard, minimum depth, evaporation, precipitation, and flows into and out of the structure.

D. Constituent Loading Rates

1. Calculate and present the expected growing season and non-growing season loading rates for key constituents. If waste solids and/or fertilizers are proposed to be applied to the land application site, reflect the application of these materials in site constituent loading rate calculations.
2. Compare expected constituent loading rates to applicable crop uptake values for the site.
3. Identify the design limiting constituent.

V. Site Management

A. Compliance Activities

1. If applying for a permit modification or a renewal permit, provide a summary and status of compliance activities under the existing permit.

B. Seepage Rate Testing

1. Discuss the need (and, if appropriate, a schedule) for seepage rate testing of wastewater structures or ponds.

C. Site Management Plans

If the site has previously developed any of management plans listed below (or other site specific plans), either separately or as part of the site Plan of Operation, provide any updates to the information presented in the plan(s). If a new site, or if the plans have not been developed for an existing site, address each of the plan topics.

1. Buffer Zone Plan:
    a. Discuss disinfection and buffer zone issues for the land application site. Address the following buffer objects: dwellings, areas of public access, canals/ditches, private water sources, and public water sources.
    b. Compare site buffer distances to DEQ guideline buffer distances. As applicable, describe any proposed mitigation measures to potentially reduce the required buffer distances.
    c. Describe current and/or proposed fencing and signing for the facility.
2. Grazing Management Plan: required if any grazing activities are proposed at the land application site.
3. Nuisance Odor Management Plan: for systems with higher strength wastewater (wastewater with a greater potential to create odors), it is highly recommended that a Nuisance Odor Management Plan be prepared as part of the permit application.
4. Waste Solids Management Plan: discuss whether or not solids are to be applied on the permitted reuse site. If so, reflect the application of waste solids in site constituent loading rate calculations. If waste solids are managed off-site, refer to IDAPA 58.01.02, Section 650 regarding sludge usage.
5. TDIS (Total Dissolved Inorganic Solids) Management Plan: to address potential increases in TDS (total dissolved solids) concentrations in groundwater and/or excessive salt levels in soils.
6. Runoff Management Plan: to address best management practices for minimization of runoff and ponding.

D. Monitoring

1. Describe how the quantity of land applied wastewater is proposed to be monitored (methodology, frequency, location).
2. Describe proposed sampling and analysis of the land applied wastewater (constituents, disinfection level, methodology, frequency, location).
3. Describe method of calculating hydraulic and constituent loading.
4. If supplemental irrigation water is expected to be used, describe how the quantity of land applied supplemental irrigation water is proposed to be monitored (methodology, frequency, location).
5. Describe proposed soil monitoring (constituents, soil depths, methodology, frequency, location).
6. Describe proposed groundwater monitoring (constituents, methodology, frequency, location).
7. Describe how crop uptake values are proposed to be determined (plant tissue monitoring, table values…).
8. Describe other proposed monitoring for the site.
9. Describe meteorological monitoring for site.

E. Site Operations and Maintenance

1. Describe who will operate and maintain the wastewater treatment facilities and land application site.
2. Describe operator certification credentials—credentials currently held and any plans for future certifications.
3. If a party other than the applicant operates and maintains the land application site, submit a copy of the signed contract or agreement outlining how the site will be operated to meet the conditions of the permit.

Guidelines for Preparing the Site Maps

If helpful for ease of preparation and/or use, the information listed under Vicinity Map and Facility Site Map may be divided between more than two maps. The maps may be included as an appendix in the technical report.

A. Vicinity Map

The Vicinity Map is a topographic map extending one quarter (1/4) mile beyond the outer limits of the facility site. As required in the Reuse rules (IDAPA 58.01.17), identify and show the location and extent of the following:

1. Property boundaries of all treatment facilities and land application area(s). Include Township(s), Range(s), Section(s).
2. Wells, springs, wetlands and surface waters.
3. Public and private drinking water supply sources and source water assessment areas (public water system protection area information).
4. Public roads.
5. Dwellings and private and public gathering places.

B. Facility Site Map

The Facility Site Map is a topographic map. As required in the Reuse rules (IDAPA 58.01.17), identify and show the location and extent of the following:

1. Wastewater inlets, outlets, and storage structures and facilities.
2. Wells, springs, wetlands, and surface waters.
3. Twenty-five (25), fifty (50), and one hundred (100) year flood plains, as available through the Federal Insurance Administration of the Federal Emergency Management Agency.
4. Service roads.
5. Natural or man-made features necessary for treatment.
6. Buildings and structures.
7. Process chemicals and residue storage facilities.

In addition, the following items are recommended to be identified on the Facility Site Map:

1. Land application area(s).
    a. For an existing site, identify the permitted hydraulic management units, including serial number, and clearly show any proposed changes to the land application acreage.

b. For an existing site, identify the soil monitoring units, including serial number.
2. For an existing site, include serial numbers for lagoons/storage ponds (if applicable).
3. Wastewater and site monitoring points, including groundwater monitoring wells (if applicable).
4. Quantify and label buffer zone distances between the land application area(s) and: dwellings, areas of public access, canals/ditches, private water sources, and public water sources.

C. Other Site Specific Maps and Drawings

Present other pertinent maps or drawings for the site. These may include:

1. Groundwater contours and direction of flow.
2. Wastewater treatment facility drawings.
3. Irrigation system design drawings showing sumps, pipelines, ditches, irrigation diversions, irrigation systems (pivots, wheel lines, etc.), and other relevant items.
4. Location and extent of run-on and/or run-off control systems including berms and tailwater collection systems.
5. Other maps important for presenting site characteristics and/or site operations.

1.4.4 Reuse Permit, Permit Process Steps

Procedures and timing for processing Reuse permit application are outlined in the Reuse rules (IDAPA 58.01.17). Applicants are encouraged to review the rules to become familiar with these procedures (a link to the Reuse rules is provided in Section 1.3 of this document).

Typical steps associated with obtaining a Reuse permit from DEQ are as follows:

1. Pre-application form submitted to the DEQ Regional Office.
2. Pre-application conference between the applicant and DEQ.
3. Applicant submits a Reuse permit application to the DEQ Regional Office.
4. DEQ performs a completeness review. Typically, at this step, DEQ also makes a preliminary decision regarding whether or not to issue a permit.
5. DEQ prepares a Staff Analysis and Draft Permit for the complete application.
6. DEQ issues a draft permit. This step includes review of the draft permit and staff analysis by DEQ's state program office and the DEQ Director. The draft permit and staff analysis are posted on the DEQ internet site.
7. Comments may be submitted by the applicant and by the public. In some cases, meetings are held between DEQ and the applicant to discuss the draft permit. Also, if appropriate, public information meetings may be held.
8. DEQ prepares responses to comments and prepares the final permit. If substantial modifications are made to the permit, they are reviewed with the DEQ Director.
9. DEQ issues final permit. The applicant may appeal the final permit, if desired.

The Reuse rules specify the following timing for submitting a Reuse permit application:

1. At least one hundred eighty (180) days prior to the day on which a new activity is to begin;
2. At least one hundred eighty (180) days prior to the expiration of any permit issued pursuant to these rules;

To meet this requirement, applicants are encouraged to plan ahead. Some applicants may need to allow six months or more for preparing the permit application prior to submittal. Examples of this may include:

1. Applying for a new permit.
2. Applying for a major permit modification.
3. Applying for a renewal permit when major changes to land application activities are to be addressed with the renewal permit.

If applying for a minor permit modification, discuss the scope and timing of the modification application with the DEQ Regional Office. For example, it may not be possible to foresee a transfer of ownership 180 days prior to the change. Requests for changes in the permit processing procedure are addressed by DEQ on a case-by-case basis.

1.5 ~~1.4.5~~ Preparing a Reuse Permit Application for the Other ~~Direct~~ Uses of Municipal Reclaimed Wastewater

Wastewater land application is one type of reuse. Other examples of reuse include the direct use of municipal reclaimed wastewater for aquifer recharge, use in surface water features, toilet flushing in commercial buildings, dust control, and irrigation of parks or golf courses.

When preparing a Reuse permit application for a reuse facility that is not a wastewater land application facility, the three major steps described in Sections 1.4.1 through 1.4.3 still apply: 1) Pre-application form submittal, 2) Pre-application conference, and 3) Reuse permit application submittal.

There are, however, specific requirements for the other ~~direct~~ uses of municipal reclaimed wastewater that must be addressed in the Reuse permit application, as detailed in the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater (Reuse Rules) <provide link to IDAPA 58.01.17>. These requirements vary greatly depending upon the class of effluent (Class A through Class E), and include, but are not limited to, treatment requirements, monitoring requirements, buffer zones, access restrictions, disinfection requirements, and allowed uses. Please refer to the Reuse Rules for a complete description.

For all but Class A effluent, these specific requirements may be addressed within the Technical Report, using the outline as presented in Section 1.4.3. For Class A effluent,

however, a separate Engineering Report must also be submitted as part of the Reuse permit application. The additional requirements for Class A effluent are detailed in IDAPA 58.01.17.601 and IDAPA 58.01.17.602.